

Notice of Allowability

Application No.

10/680,896

Examiner

Natalie K. Walford

Applicant(s)

ISHIGAMI ET AL.

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 5/8/06.
2. ☒ The allowed claim(s) is/are 1-8 and 10-19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment

The Amendment, filed on May 8, 2006, has been entered and acknowledged by the Examiner.

Claims 1-8 and 10-19 are pending in the instant application.

Allowable Subject Matter

Claims 1-8 and 10-19 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 1, specifically for the limitation of the discharge medium containing a halide, a rare gas, substantially disusing mercury and, the light irradiating from the metal vapor discharge lamp has near infrared wavelengths (750-1100 nm). The closest references of the Prior Art teach similar metal vapor discharge lamps, but irradiating in visible light wavelengths (Ishigami patents; '946, 109', and '289). Tsuda (JP 2003-257367) teaches a metal halide lamp irradiating with near infrared wavelengths, but does not contain a rare gas.

Regarding claims 2-5 and 13-19, claims 2-5 and 13-19 are allowable for the reasons given in claim 1 because of their dependency status from claim 1.

Regarding claim 6, the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 6, specifically for the limitation of the discharge medium containing a first halide, a rare gas, a rare earth metal, substantially disusing

Art Unit: 2879

mercury, and a ratio of visible-radiation power to near-infrared radiation power falling within a range of 0.5:1 to 4.0:1. The closest references of the Prior Art teach similar metal vapor discharge lamps, not that ratio because they are irradiating more in visible light wavelengths than near infrared wavelengths (Ishigami patents; '946, 109', and '289).

Regarding claims 7-8 and 10-12, claims 7-8 and 10-12 are allowable for the reasons given in claim 1 because of their dependency status from claim 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishigami et al. (US 6,528,946) is cited to show a metal halide discharge lamp.

Ishigami et al. (US 6,873,109) is cited to show a metal halide discharge lamp.

Tsuda et al. (JP 2003-257367) is cited to show a metal halide lamp using mercury or another metal halide and irradiating in near-infrared wavelengths.

Art Unit: 2879

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012.

The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nkW

Natalie K. Walford
7/24/06

Nimesh Kumar D. Patel
NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800